Invention

Developing original products or processes that meet specific needs (12 of 13 thinking/reasoning skill processes)

Creating a Performance Task

Step 1: Identify a content standard to be taught.

Step 2: Select thinking/reasoning skill processes.

Step 3: Write a 1st draft of the task incorporating steps 1 and 2.

Step 4: Identify standards from Learner Performance goals (LLL) to be included and revise task to make these standards explicit.

Step 5: Identify what kind of product/performance will be produced, add it to the performance task description.

Teaching a Thinking Skill

- Introduce skill, give several examples, and discuss its performance (when, where, how to use it).
- Explain mental processes to do the thinking, model the process.
- □ Let students practice the skill several times using personal, easy to understand content.
- Put the skill into the context of your academic content.
- □ Model, model, model!

Questions the Process Helps Explore

- □ What do I want to make or what do I want to make better?
- What standards do I want to set for my invention?
- □ What is the best way to make a rough draft of my invention?
- How can I improve on my rough draft?
- Does my invention meet the standards I have met?

Steps in the Process

1. Choice

- □ Identify a situation you want to improve or a need you want to respond to.
- □ State your purpose or goal; write or say it several times in several different ways to look at it from different perspectives.

2. Rehearsal

- Identify specific standards for your invention. What specifically do you want it to do?
- □ Make a model, sketch or outline of your invention.

3. Drafting

- □ Start developing your product. Keep looking for alternatives and even better ways of creating your product. Do not be too easily satisfied.
- □ Occasionally set your partially completed product aside so you can be more objective when you return to it.

4. Revising

- □ Keep going over your invention with attention to detail.
- □ Stop when you have reached a level of completeness.
- □ Consistent with the norms and standards you have set.

Optional Graphic Organizers

Checklist

- □ What do I want to make or what do I want to make better?
- What do I want my invention to do?
- What is a model (or sketch/outline) of my invention?
- □ How can I make it?
- □ How can I improve it?

Example

People in wheelchairs have many problems in houses designed for people who are able to maneuver more easily, reach, and stand. Design a kitchen that is "wheelchair friendly," using any arrangement and materials you think are appropriate. Your design should allow the person in the wheelchair to do without assistance anything that a person who has no physical impediment can do in a regular kitchen.

